

**FILE COPY**

Office - Supreme Court, U. S.

**FILED**

**JUN 17 1938**

**CHARLES ELMORE GROPLEY**  
CLERK

IN THE

**Supreme Court of the United States**

**October Term, 1938**

**No. 127**

**MACKAY RADIO AND TELEGRAPH COMPANY,  
INC.,**

*Petitioner,*

*vs.*

**RADIO CORPORATION OF AMERICA,**  
*Respondent.*

**PETITION OF MACKAY RADIO AND TELEGRAPH  
COMPANY, INC., FOR A WRIT OF CERTIORARI TO  
THE CIRCUIT COURT OF APPEALS FOR THE  
SECOND CIRCUIT, AND BRIEF IN SUPPORT  
THEREOF.**

**SAMUEL E. DARBY, JR.,**  
*Attorney for Petitioner.*

✓ **HUGH M. MORRIS,**  
✓ **PAUL KOLISCH,**  
**ROY C. HOPGOOD,**  
**E. D. PHINNEY,**  
*of Counsel.*

## INDEX.

---

	PAGE
Petition for Writ of Certiorari.....	1
Summary and Short Statement of the Matter In- volved .....	2
Reasons Relied Upon for the Grant of a Writ of Certiorari .....	5
Brief in Support of Petition.....	9
Opinions of the Courts Below.....	9
Jurisdiction .....	9
Statement .....	10
Specifications of Error.....	10
Summary of Argument.....	11
Argument .....	11
POINT I.—The Court of Appeals has sustained a patent of the Radio Patent Pool, thereby vesting in respondent a monopoly in public service radio telegraph communication.....	11
POINT II.—The Circuit Court of Appeals for the Second Circuit reversed every essential find- ing of fact made by the Trial Court on the conflicting evidence before him.....	12
POINT III.—Because petitioner is the only com- petitor of respondent in the field of world wide public radio telegraph communications there is no likelihood of the Carter patent being again involved in litigation in another circuit whereby diversity of opinion of Cir- cuit Courts of Appeals would be possible.....	14

POINT IV.—The facts and circumstances of this case place it in that class of cases in which this Court has granted writs of certiorari in the absence of diversity of opinion between Circuit Courts of Appeals .....	15
POINT V.—The Carter patent is invalid because of improper amendment thereof, and because it is completely anticipated by and discloses no patentable invention over the prior published art .....	16
Conclusion .....	20

### Table of Cases Cited.

Adamson v. Gilliland, 242 U. S. 350.....	6, 13, 15
Altoona Publix Theatres Inc. v. American Tri-Ergon Corp., 294 U. S. 477.....	7, 9, 15
Carbice Corporation v. American Patents Development Corp., 283 U. S. 27.....	7, 10, 15
Chicago & N. W. R. Co. v. Sayles, 97 U. S. 554.....	18
DeForest Radio Co. v. General Electric Co., 283 U. S. 664 .....	7, 10, 15, 18
Irving Air Chute Co. v. Switlik Parachute Equipment Co., 82 Fed. (2) 644.....	18
Lopulco Systems Inc. et al. v. Bonnet Co., 24 Fed. (2) 510 .....	18
Lord et al. v. Radio Corporation of America, 24 Fed. (2) 565 .....	2
Lord et al. v. Radio Corporation of America, 28 Fed. (2) 257.....	2
Lord et al. v. Radio Corporation of America, 35 Fed. (2) 962 .....	2
Lord et al. v. Radio Corporation of America, 47 Fed. (2) 606 .....	2

Paramount Publix Corp. v. American Tri-Ergon Corp., 294 U. S. 464 .....	6, 9, 15
Schribner-Schrott Co. v. Cleveland Trust Co., Chrysler Corp., No. 674, October Term, 1937; certiorari granted May 31, 1938 .....	6, 9, 15
Stanley Company of America v. American Telephone & Telegraph Co., General Talking Pictures Corp. v. American Telephone & Telegraph Co., Duovac Radio Corporation v. American Telephone & Tele- graph Co., 4 Fed. Supp. 80 .....	2
Stanley Company of America v. American Telephone & Telegraph Co., General Talking Pictures Corp. v. American Telephone & Telegraph Co., Duovac Radio Corporation v. American Telephone & Tele- graph Co., 18 Fed. Supp. 650 .....	2
The Barber Asphalt Case, 302 U. S. 458 .....	6, 9, 15

IN THE  
**Supreme Court of the United States**

October Term, 1938

No. . . .

MACKAY RADIO AND TELEGRAPH COMPANY,  
INC.,

*Petitioner,*

*vs.*

RADIO CORPORATION OF AMERICA,

*Respondent.*

**PETITION OF MACKAY RADIO AND TELEGRAPH  
COMPANY, INC., FOR A WRIT OF CERTIORARI TO  
THE CIRCUIT COURT OF APPEALS FOR THE  
SECOND CIRCUIT.**

*To the Honorable, The Chief Justice, and Associate Justices  
of the Supreme Court of the United States:*

Your petitioner, Mackay Radio and Telegraph Company, Inc., respectfully prays for a writ of certiorari to the Circuit Court of Appeals for the Second Circuit to review the judgment of that Court entered on May 2, 1938. A transcript of the record in the case, including the proceedings in said Circuit Court of Appeals, is furnished herewith in accordance with the Rules of this Court.

## Summary and Short Statement of the Matter Involved.

1. This is a patent infringement suit brought by respondent, Radio Corporation of America, on patents included in the patent pool which forms the so-called "Radio Trust".\*

2. Petitioner is a public service company engaged, with associated companies, in the radio telegraph transmission of public messages between the principal cities of the United States and foreign countries. *In this respect petitioner and its associated companies constitute the only competition to the world wide public service operations of respondent, Radio Corporation of America, and its subsidiary RCA-Communications.*

3. The present suit is directed to the effort on the part of respondent to eliminate competition in its public service operations, i. e., to completely eliminate competition in public radio communication between the principal cities of the United States, and between the United States and the other nations of the world.

4. Respondent initially filed suit charging petitioner with infringement of four patents having to do with an-

---

\* See *Lord et al. v. Radio Corporation of America*, 24 Fed. (2) 565;

*Same v. Same*, 28 Fed. (2) 257;

*Same v. Same*, 35 Fed. (2) 962;

*Same v. Same*, 47 Fed. (2) 606.

*Stanley Company of America v. American Telephone & Telegraph Co.*, *General Talking Pictures Corp. v. American Telephone & Telegraph Co.*, *Duovac Radio Corporation v. American Telephone & Telegraph Co.*, 4 Fed. Supp. 80.

*Same v. Same*, 18 Fed. Supp. 650.

tenna structures and their operation. At the time the bill was filed respondent had pending in the Patent Office, in the name of one Carter, an application for a fifth patent for an antenna structure. Subsequent to petitioner's answer in the suit, and after receiving particulars as to the structure and operation of petitioner's antennas, respondent completely altered the statement and claim of invention in the pending Carter application so as to attempt to include therewithin petitioner's antenna structures.\*

5. Thereafter the Carter patent issued (referred to in the litigation as the "Third Carter patent") and a supplemental bill of complaint was filed charging infringement thereof. The suits were consolidated and the parties proceeded to trial on all five patents before Judge CAMPBELL in the Eastern District of New York.

6. After a trial which lasted nearly a month, Judge CAMPBELL dismissed the bills of complaint as to all patents, finding as a fact, on the conflicting evidence before him, that petitioner's antennas differed "radically" from all of the patents "in structure, principle of operation and in-

---

\* The District Court stated in its opinion (Vol. II, p. 1377, fol. 4129):

"The disclosure and the claims were broadened not only contrary to their original terminology but to their spirit as well."

and (fol. 4131):

"\* \* \* by those amendments the plaintiff attempted to mould the third Carter patent, both as to disclosure and claims, to cover defendant's antenna systems.

This could not lawfully be done."



strumentalities", and operated on principles not only different from those of the patents, but "contradictory thereto as well".\*

7. Respondent acquiesced in the decree of the District Court dismissing the bill of complaint as to three of the patents, but appealed from that decree as to the two antenna patents—Lindenblad 1,927,552 and the Carter patent.

8. The appeal was argued April 8th, 1938. On May 2nd, barely more than three weeks thereafter, the Court of Appeals announced its decision (per Judge MANTON) holding the Carter patent valid and infringed. Thereby it, in effect, reversed every essential finding of fact made by the District

---

\* The District Court said (Vol. II, p. 1363, fol. 4087):

"The defendant's antennas which are charged with infringement differ *radically* from the inventions claimed in the three antenna patents in suit." (Italics ours.)

Again, the Court said (p. 1364, fol. 4090):

"In substance all of the antenna patents in suit present merely a theoretical application of antenna wires in free space, whereas all of defendant's antennas are intentionally designed to cooperate with ground effect, *which effect is not only not contemplated by any of the patents in suit, but is contradictory to the description and claims thereof.*" (Italics ours.)

The Court also found (p. 1372, fol. 4115):

"Due to the departure from the Carter patent in the respects enumerated and by reason thereof in all of defendant's antennas here charged to infringe, defendant obtains material advantages and increased efficiency in that material increase in radiated power is obtained."

Finally, the Court found (p. 1380, fol. 4139):

"\* \* \* the fact is, however, that *defendant's systems are radically different from the patents in suit, in structure, principle of operation and instrumentalities*, and were designed and constructed to secure and did secure greater radiation, by reason of such difference, than could be obtained by the patents in suit." (Italics ours.)



Court, although the Court of Appeals did not point out any error in such findings of the District Court, or cite any evidence to support its contrary finding. It affirmed the District Court with respect to the Lindenblad patent.

9. The present petition therefore seeks a review of the decision of the Court of Appeals for the Second Circuit only insofar as it holds the Carter Patent No. 1,974,387 valid and infringed by petitioner's antennas, *all of which were erected and fully disclosed to respondent prior to the issuance of the said patent.*

### **Reasons Relied Upon for the Grant of a Writ of Certiorari.**

The discretionary power of this Court is invoked upon the following grounds:

1. The Circuit Court of Appeals for the Second Circuit has sustained a patent of the "Radio Trust" patent pool, thereby vesting in respondent a complete monopoly in the type of antenna structure which respondent asserts is essential to modern, efficient, economical, long distance radio communication. The consequence is that thereby respondent becomes vested with a complete monopoly in public service radio telegraph communication. This is a matter of such great economic and public importance, and so materially affects public interests, as to warrant a review by this Court to test the validity of the basis upon which so vast, far reaching and important a monopoly is based.

2. The Circuit Court of Appeals for the Second Circuit, in holding the Carter patent to be valid and infringed by petitioner's antenna structures, reversed every essential finding of fact made by the District Judge on the conflicting

evidence before him, thus rendering a decision which is untenable and in direct conflict with the doctrine announced by this Court in *Adamson v. Gilliland*, 242 U. S. 350, at 353 that—

“ . . . so far as the finding of the Master or Judge who saw the witnesses ‘depends upon conflicting testimony or upon the credibility of witnesses, or so far as there is any testimony consistent with the finding, it must be treated as unassailable’.”

3. Because of the fact that petitioner and its associated companies constitute the only competition to respondent in the public service field of world wide radio telegraph communication there is no likelihood of the Carter patent being involved in other litigation, with the result that the decision of the Court of Appeals will probably be the only and final decision with respect to the Carter patent, by which respondent seeks to effect and maintain a monopoly in such communications until September 18, 1951, the date of expiration of the patent.

4. Although there is no diversity of opinion between Circuit Courts of Appeals with respect to the Carter patent, the sharp conflict in the conclusions reached by the Trial Judge and by the Court of Appeals, in a case involving subject matter of such great public importance, and of a nature wherein there is no likelihood of the patent ever being litigated again, warrants a review by this Court.

*Schribner-Schrott Co. v. Cleveland Trust Co.,  
Chrysler Corp.*, No. 674, October Term, 1937;  
certiorari granted May 31, 1938;  
*The Barber Asphalt Case*, 302 U. S. 458;  
*Paramount Publix Corp. v. American Tri-Ergon  
Corp.*, 294 U. S. 464;

*Altoona Publix Theatres Inc. v. American Tri-Ergon Corp.*, 294 U. S. 477;

*Carbice Corporation v. American Patents Development Corp.*, 283 U. S. 27;

*DeForest Radio Co. v. General Electric Co.*, 283 U. S. 664.

5. The Court of Appeals for the Second Circuit has sustained as valid a patent which is invalid because of improper amendment thereof, and because it is completely anticipated by and discloses no patentable invention over the prior published art.

WHEREFORE, your petitioner respectfully prays that a writ of certiorari be issued out of and under the seal of this Court, directed to the United States Circuit Court of Appeals for the Second Judicial Circuit, sitting at New York, New York, commanding such Court to certify and send to this Court, on a day to be designated, a full transcript of the record and all proceedings of the Court of Appeals had in this case, to the end that this case may be reviewed and determined by this Court; that the judgment of the Court of Appeals be reversed; and that petitioner be granted such other and further relief as may seem proper.

SAMUEL E. DARBY, JR.,  
*Attorney for Petitioner.*

HUGH M. MORRIS,  
PAUL KOLISCH,  
ROY C. HOPGOOD,  
E. D. PHINNEY,  
*of Counsel.*

Dated: New York, N. Y.  
June 15th, 1938.

## BRIEF IN SUPPORT OF PETITION FOR WRIT OF CERTIORARI.

### Opinions of the Courts Below.

The opinion of the Circuit Court of Appeals for the Second Circuit is not yet reported, but is found in the printed record Vol. II, page 1400.

The opinion of the District Court is reported in 16 Fed. Supp. 610 (Rec. Vol. II, p. 1345 *et seq.*).

### Jurisdiction.

The grounds of jurisdiction are:

1. The date of the judgment to be reviewed is May 2, 1938.
2. The judgment was rendered in a suit in equity brought under the patent statutes to determine the issues of validity and infringement of Letters Patent of invention.
3. The statute under which the jurisdiction is invoked is 240-A of the Judicial Code, 28 U. S. C. 347, as amended by the Act of February 13, 1925.
4. The cases believed to sustain the jurisdiction are:

*Schribner-Schrott Co. v. Cleveland Trust Co., Chrysler Corp.*, No. 674, October Term, 1937; certiorari granted May 31, 1938;

*The Barber Asphalt case*, 302 U. S. 458;

*Paramount Public Corp. v. American Tri-Ergon Corp.*, 294 U. S. 464;

*Altoona Public Theatres Inc. v. American Tri-Ergon Corp.*, 294 U. S. 477;

*Carbice Corp. v. American Patents Development Corp.*, 283 U. S. 27;  
*DeForest Radio Co. v. General Electric Co.*, 283 U. S. 664.

### **Statement.**

The facts are sufficiently stated in the petition.

### **Specifications of Error.**

The errors which petitioner will urge, if the writ of certiorari is allowed, are that the Circuit Court of Appeals for the Second Circuit erred:

1. In sustaining the Carter Patent No. 1,974,387 as valid and infringed.
2. In overruling every essential finding of fact of the District Court with respect to the issues relevant to the Carter patent without authority or reference to the evidence.
3. In failing to affirm the District Court on the facts found by that Court, and established by the record, whereby the Carter Patent No. 1,974,387 is invalid because of unlawful amendment to its statement, description and claim of invention.
4. In failing to affirm the District Court's finding of fact that defendant's antenna structures, charged to infringe, differ "radically . . . in structure . . . , principle of operation, and instrumentalities" from that of the patent, and operate on principles not only different from those of the patent but "contradictory thereto as well".



5. In failing to hold Carter Patent No. 1,974,387 invalid as completely anticipated by and wanting in invention over the prior art.

### **Summary of Argument.**

The points of argument follow the reasons relied upon for the grant of a writ of certiorari, and are stated on pages 5 to 7 of the Petition, as well as in the index hereto. For the sake of brevity they are omitted at this point.

## **ARGUMENT.**

### **POINT I.**

**The Court of Appeals has sustained a patent of the Radio Patent Pool, thereby vesting in respondent a monopoly in public service radio telegraph communication.**

The Carter patent relates to a V-antenna structure, and is asserted to cover the type of antennae structure possessing the qualities of economy of erection and maintenance, and efficiency of operation, necessary to conduct directive intercity and international radio telegraph communication. The patent is one of those included in the pool of patents of the so-called Radio Trust. It requires but brief statement, and no argument, to point out that the subject of radio telegraph communication is of such importance as to warrant the careful scrutiny by this Court of the validity of the basis for any monopoly in that field. That is especially so when, as here, it is the public service field of radio telegraph communications that is involved.

While we do not question the propriety of a patent monopoly, we do assert that such a monopoly in a public service utility—*public communications*—is of such magnitude and of such vital importance to the public at large that the validity of the grant upon which it purports to be predicated should be scrutinized by this Court in a review of this case. It is submitted that this is especially so where, as here, there is such sharp conflict between the conclusions and findings of the Trial Judge and of the appellate Court.

## POINT II.

**The Circuit Court of Appeals for the Second Circuit reversed every essential finding of fact made by the Trial Court on the conflicting evidence before him.**

In reaching its decision, resulting in a reversal of the Trial Judge and the holding of validity for the Carter patent as well as the infringement thereof, the Court of Appeals necessarily reversed every essential finding of fact made by the Trial Judge on the conflicting evidence before him. This the Court of Appeals did without pointing out any error on the part of the Trial Judge, and without reference to any authority or evidence to support its conclusions.

Thus, as we have pointed out (see footnote, p. 4), the Trial Judge found that defendant's antennas differed "radically" from the Carter patent "in structure, principle of operation and instrumentalities", and operated on principles not only different from those of the Carter patent, but "contradictory thereto as well". The Court of Appeals swept aside these fact findings without comment, and ar-



rived at a diametrically opposite conclusion without citation of authority or evidence.

Again, the Trial Judge found that by illegal amendment, unsupported by the oath of the inventor, the application for the Carter patent had been altered in the effort to have the patent cover defendant's structures. With respect to this amendment the Court said (Vol. II, p. 1337, fol. 4129):

"The disclosure and the claims were broadened not only contrary to their original terminology but to their spirit as well."

The Court further said (fol. 4131) that:

" \* \* \* by those amendments the plaintiff attempted to mould the third Carter patent, both as to disclosure and claims, to cover defendant's antenna systems.

This could not lawfully be done."

The Court of Appeals also swept aside these fact findings of the Trial Judge without citation of evidence or authority.

This complete reversal of all essential fact findings of the Trial Judge, made on conflicting evidence before him, is believed to be in direct conflict with the decision of this Court in *Adamson v. Gilliland*, 242 U. S. 350. In that case this Court said (at p. 353):

" \* \* \* so far as the finding of the Master or Judge who saw the witnesses 'depends upon conflicting testimony or upon the credibility of witnesses, or so far as there is any testimony consistent with the finding, it must be treated as unassailable'."

It is submitted, therefore, that the Court of Appeals, in sustaining the Carter patent as valid and infringed under such circumstances, has rendered a decision which is untenable.

### POINT III.

Because petitioner is the only competitor of respondent in the field of world wide public radio telegraph communications there is no likelihood of the Carter patent being again involved in litigation in another circuit whereby diversity of opinion of Circuit Courts of Appeals would be possible.

Petitioner operates the "Mackay" Radio System, which is a public service system, handling public radio telegraph messages between the principal cities of the United States and between the United States and foreign countries. The Mackay System is the only competitor of respondent and its communications subsidiaries in world wide radio telegraph communication. The antenna structure forming the subject matter of the Carter patent is of the "directive" type that is used exclusively for point-to-point communication, as distinguished from the undirective type used for radio broadcast (i. e., a *directive* antenna concentrates the radiation in the form of a narrow beam directed at a specific receiving station, whereas *broadcast* antennas are designed to radiate *in all directions*). The only other large organization interested in world wide public communications is the American Telephone and Telegraph Company and it, by virtue of its membership in the Radio Trust and patent pool, is possessed of a license under the Carter patent.

In consequence, the decision of the Court of Appeals in the present case constitutes what will undoubtedly be the sole and final decision on the Carter patent unless this Court grants a review in this case.

## POINT IV.

The facts and circumstances of this case place it in that class of cases in which this Court has granted writs of certiorari in the absence of diversity of opinion between Circuit Courts of Appeals.

It is respectfully urged that although there is here no diversity of opinion between Circuit Courts of Appeals, in view of the great public importance of the subject matter involved; in view of the untenable character of the decision of the Court below because of the doctrine of *Adamson v. Gilliland*, *supra*; and in view of the probability, for the reasons given above, that the Carter patent will never again be in litigation, the present case belongs to that class of cases in which this Court has granted writs of certiorari in the absence of diversity of opinion between Circuit Courts of Appeals.

*Schribner-Schrott Co. v. Cleveland Trust Co., Chrysler Corp.*, No. 674, October Term, 1937; certiorari granted May 31, 1938;  
*The Barber Asphalt case*, 302 U. S. 458;  
*Paramount Publix Corp. v. American Tri-Ergon Corp.*, 294 U. S. 464;  
*Altoona Publix Theatres Inc. v. American Tri-Ergon Corp.*, 294 U. S. 477;  
*Carbice Corp. v. American Patents Development Corp.*, 283 U. S. 27;  
*DeForest Radio Co. v. General Electric Co.*, 283 U. S. 664.

## POINT V.

The Carter patent is invalid because of improper amendment thereof, and because it is completely anticipated by and discloses no patentable invention over the prior published art.

While it is impractical to here indulge in an extended discussion of the subject matter and merits of the Carter patent, it is believed that a cursory examination of the record will show the two salient grounds of invalidly mentioned in this heading.

The patent purports to cover an antenna structure, the wires of which are arranged in the form of a V. The patent no less than eleven times (see Vol. I, R. 313, 318) emphasizes as its main feature the procurement of predominant radiation *in the plane of the wires and along the direction of the axis of the conductor system* (see, for example, claim 19). This was categorically admitted by respondent's expert (Vol. I, R. 269).<sup>\*</sup> In order to accomplish this result it

---

<sup>\*</sup> In this connection it should be pointed out that the Carter patent teaches that all radiation from the antenna, at all times, is "*in the plane of the wires*", and along the axis or bisector of the angle formed by the legs of the V; and the specification points out (Vol. II, p. 688, line 27 *et seq.*) that if it is desired to radiate at *an angle* to the earth's surface it is necessary to tilt the wires to that desired angle.

As distinguished from this, petitioner's antennas are so designed that they deliberately and intentionally do *not* radiate in the plane of the wires. To the contrary, the radiation is intentionally effected at a substantial *angle* to the plane of the wires. As to this the Trial Judge found (Vol. II, 1375, fol. 4123):

"Defendant does not radiate in the plane of the wires, whereas the third Carter patent in suit is expressly limited as to some claims, and impliedly as to all thereof, to radiation in the plane of the wires, and, in fact, on the line bisecting the angle between the legs of the V."

Again the Court said (p. 1378, fol. 4132):

"As I have hereinbefore stated, defendant's antennas radiate at an angle to their planes and to their bisectors, *and this is contrary to Carter's teachings*. The third Carter patent in suit deals *only* with horizontal radiation from an antenna in the plane of the wires and the bisector of the angle." (Italics ours.)

is necessary that the wires forming the legs of the V be arranged at a specifically predetermined angle. In other words, the angle of the direction of radiation relative to the radiating wire must be determined. The mathematical formula for this determination—known as the Abraham formula—has been known in the art since 1898 (Vol. II, R. 960, 970). The Carter patent purports to cover the application of the old Abraham formula to V-antenna wires (see, for example, claims 9 *et seq.*, Vol. II, R. 689, wherein the Abraham formula is claimed). However, the Abraham formula is correctly applied *only* if the antenna wires are *an odd or even multiple of half wave lengths long*. It *cannot* be correctly applied to antenna wires which are not *exactly* an odd or even multiple of half wave lengths long.

The Carter application, as filed, and as it stood in the Patent Office until after petitioner's answer had been filed in this suit, dealt only with antenna wires a plurality of half wave lengths long to which the Abraham formula was correctly applicable. For example, claim 5 of the application (see Vol. II, R. 1255) defined the length of the conductors as "substantially a plurality of half wave lengths long".

All of petitioner's antennas (with one exception) varied from an integral multiple of half wave lengths by approximately one-quarter wave length, i. e., varied about as much as was physically possible. This, of course, was made known to respondent shortly after petitioner's answer was filed in May, 1934. In consequence, in August, 1934, respondent amended the Carter specification by adding thereto the paragraph now appearing on page 4, lines 35-42, inclusive, of the patent, as follows (Vol. II, R. 688):

"By the term 'plurality of wave lengths', or 'plurality of half wave lengths', or 'several half wave lengths', it is not intended that the wires so



described shall necessarily be an exact or approximate integral number of such lengths, unless so specified, but rather that each of the wires so described shall be sufficiently long to include the lengths specified."

In consequence, claims, such as claim 5, which theretofore had claimed "substantially a plurality of half wave lengths long" were amended at that time (August 4th—see Vol. II, R. 1335) to read:

"of a length *including* substantially a plurality of half wave lengths".

This amendment, which so radically changed the disclosure of the Carter application, and the invention claimed thereby, was never supported by the oath of the inventor, and was quite obviously made for the purpose of attempting to remodel the alleged invention of Carter so as to include within its claims petitioner's antenna structures—something that was never contemplated by Carter nor included in his inventor's oath as prescribed by the statutes. This could not be legally done.

*Chicago & N. W. R. Co. v. Sayles*, 97 U. S. 554;  
*DeForest v. General Electric Co.*, 283 U. S. 664;  
*Lopulco Systems Inc. et al. v. Bonnet Co.*, 24 Fed.  
 (2) 510;  
*Irving Air Chute Co. v. Switlik Parachute Equip-  
 ment Co.*, 82 Fed. (2) 644.

On this point the District Judge held (Vol. II, R. 1377, fol. 4129):

"The disclosure and the claims were broadened not only contrary to their original terminology but to their spirit as well. Carter throughout the specifi-

cation dealt with conductors measured in half wavelengths or full wavelengths and did not mention conductors a multiple of a quarter wavelength long, or conductors of greater or less than half wavelengths. The two Abraham formulae are applicable only to wires an exact number of half wavelengths long."

The Court further said (fol. 4131):

" \* \* \* by those amendments the plaintiff attempted to mold the third Carter patent both as to disclosure and claims, to cover defendant's antenna systems.

This could not lawfully be done."

Moreover, there was not the slightest vestige of novelty in the Carter patent. The asserted invention of the prior Lindenblad patent (Vol. II, R. 672), which admittedly preceded Carter, shows that a V-antenna was old in the art.\* The District Court's holding of non-infringement of this Lindenblad patent was affirmed by the Court of Appeals.

In addition, the use of the Abraham formula to determine the angle of radiation relative to the radiator (the stated purpose for the formula in the original Abraham articles) is shown in the Lindenblad Patent No. 1,884,006, Vol. II, R. 658, which, likewise, it is conceded, preceded Carter. This Lindenblad patent was one of the patents in suit, and was held not infringed by the Trial Judge, in which holding respondent acquiesced.

It is believed that the foregoing is sufficient to demonstrate quite conclusively the utter want of validity for the

---

\* See, also, French Bethenod Patent No. 596,737 (Vol. II, R. 1027) which (R. 1029) points out that the antenna wires may be

"inclined not only with respect to the ground, but also with respect to one another so as to obtain directional effects either in the horizontal plane or in the vertical plane or in both planes."

See, also, Levy patent (R. 1076) where the antenna wires are shown arranged in a V with respect to each other.



Carter patent, either as a matter of law or as a matter of subject matter. In view of the other factors of the case, previously reviewed, this emphasizes the necessity for review by this Court to prevent grave injustice being done in a matter of great legal, economic, and public importance.

### **Conclusion.**

*Wherefore, petitioner earnestly prays that the petition for writ of certiorari be granted, the cause reviewed, and the decree of the Court of Appeals for the Second Circuit reversed.*

Respectfully submitted,

SAMUEL E. DARBY, JR.,  
*Attorney for Petitioner.*

HUGH M. MORRIS,  
PAUL KOLIBCH,  
ROY C. HOPGOOD,  
E. D. PHINNEY,  
*of Counsel.*